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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,540	01/27/2004	Osamu Shibata	SHIB3003/FJD	9619
23364	7590	01/09/2006	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			PAK, JOHN D	
			ART UNIT	PAPER NUMBER
			1616	

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/764,540

Applicant(s)

SHIBATA, OSAMU

Examiner

JOHN PAK

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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Claims 1-2 are pending in this application.

Applicant is advised to make the following changes to improve the claim language:

(1) The phrase, "spray gun **whose** pumping rate is ..." (emphasis added) is grammatically incorrect. The emphasized term, "whose" should only be used to refer to a person, not an inanimate object. Rephrasing is suggested.

(2) Claim 1, line 1, "a" should be inserted after "A method of spray coating".

(3) Claim 2, last line, "minutes" should be changed to --- minute --- .

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Derwent abstract 2003-336022.

Derwent abstract 2003-336022 discloses the same exact titanium phosphate compound as applicant's titanium phosphate for deodorizing, antibacterial and antifungal utilities. Spraying and applying steps are disclosed. Substrates such as carpets, clothes, bedding materials, shoes, insoles, towels, filters, metals, glass, plastics are disclosed to be treated.

It is recognized that Derwent abstract 2003-336022 does not expressly disclose the claimed coating rate of 10-30 g/m² using a spray gun that has a pumping rate of 33-34 cc/minute. However, it is noted that such process step utterly fails to limit the treated article in any patentably distinct way. This is because the coating rate and pumping rate with a gun is meaningless unless the concentration of the coating solution and the duration of the spraying are predefined. Without those additional parameters, an extremely dilute solution coated for, say 2 seconds, is readable on the claims, as well as an extremely concentrated solution coated for, say 10 minutes. Therefore, applicant's claim language is actually open to all different range of titanium phosphate actually deposited on the treated article. Further, the "film thereon" language in the claim reads on the byproduct of spraying, as taught by the cited reference. Thus interpreted, the claimed invention is anticipated by the treated articles explicitly disclosed by Derwent abstract 2003-336022.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Derwent abstract 2003-336022.

Derwent abstract 2003-336022 discloses the same exact titanium phosphate compound as applicant's titanium phosphate for deodorizing, antibacterial and antifungal utilities. Spraying and applying steps are disclosed. Substrates such as carpets, clothes, bedding materials, shoes, insoles, towels, filters, metals, glass, plastics are disclosed to be treated.

The difference between the claimed invention and the cited reference is that the reference does not expressly disclose a coating rate of 10-30 g/m² using a spray gun that has a pumping rate of 33-34 cc/minute.

One having ordinary skill in the art would have been motivated to select various coating rates and pumping rates depending on the substrate to be treated, the concentration of the solution and duration of the spraying. Based on the routine optimization it would take to determine appropriate amount of titanium phosphate that must be deposited on the substrate to effectively function as a deodorizer, antibacterial agent and antifungal agent, one having ordinary skill in the art would have been motivated to adjust the coating rate and pumping rate to deliver suitably effective amounts to the substrate. Coating rate of 10-30 g/m² and pumping rate of 33-34 cc/minute would be dependent on the concentration of the coating solution and coating application duration, and one having ordinary skill in the art would have been capable of

adjusting each parameter to ultimately deliver an effective deodorizing, antibacterial and antifungal amount of the titanium phosphate to the substrate. As for choosing a spray gun, such a generalized description actually encompasses most spraying equipment, so it would have been obvious to utilize a spray gun from the spraying step taught by the cited reference.

Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention and the claimed invention as a whole have been fairly disclosed or suggested by the teachings of the cited reference.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to JOHN PAK whose telephone number is **(571)272-0620**. The Examiner can normally be reached on Monday to Friday from 8 AM to 4:30 PM.

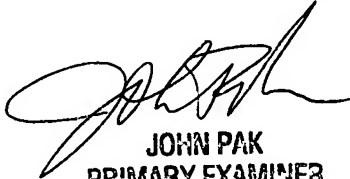
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's SPE, Gary Kunz, can be reached on **(571)272-0887**.

The fax phone number for the organization where this application or proceeding is assigned is **(571)273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1600.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JOHN PAK
PRIMARY EXAMINER
GROUP 1600